



Connecticut Fund for the Environment

Testimony of Connecticut Fund for the Environment Before the Energy and Technology Committee

In support of S.B. 23 AN ACT CONCERNING GLOBAL WARMING

**Charles J. Rothenberger, Staff Attorney
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Connecticut Fund for the Environment is a non-profit environmental advocacy organization with approximately 6,500 members statewide. CFE has 25 years of experience using science, law, and public education to protect Connecticut's critical natural resources.

Connecticut Fund for the Environment is pleased that the Energy and Technology Committee has raised Senate Bill 23. This legislation recognizes that while Connecticut has made some progress in addressing the problem of global warming, more action is necessary.

This bill recognizes that addressing global warming is not only good for the environment and public health, but is also good economic policy, and proposes useful policies, including incentives, to encourage increased energy efficiency, to support renewable energy and to train workers for the economy of the future. That being said, these proposals only begin to address what needs to be done if we are to avoid the worst consequences of global warming.

Any legislation that purports to address global warming must include, at a minimum, mandatory science-based emissions limits and establish a statewide cap on carbon emissions.

The science is clear that we must place ourselves on a pathway to reducing our greenhouse gas emissions by at least 80% over the coming decades. And that effort must begin now. The longer we wait to seriously start reducing our emissions, the harder the task will be.

It is clear that voluntary goals are no longer sufficient. Other states, such as California and New Jersey, have already established mandatory greenhouse gas emissions limits and are working to implement them. A host of other states, including Massachusetts, Rhode Island, and Maryland are moving forward to adopt mandatory carbon caps. These states recognize that we have a moral obligation to act now for future generations. Moreover,

they recognize that the same solutions that are necessary to solve the climate crisis are solutions that provide significant economic and health benefits.

At the local level, 592 mayors from all 50 states (representing a population of over 67 million citizens) have signed the U.S. Mayors Climate Protection Agreements committing themselves to meet or exceed the Kyoto Protocol targets and urging state government to take action to meet or beat those targets. Among those signing the Agreement are 13 Connecticut mayors¹ representing the largest cities in the state.

In addition to the policies embodied in this legislation, we urge the Legislature to create the necessary framework to achieve the required greenhouse gas emissions reductions and will work in a bipartisan fashion to pass mandatory greenhouse gas emission limits in the 2008 legislative session.

The debate about global warming is over. The Intergovernmental Panel on Climate Change, a United Nations panel composed of leading climate scientists from member nations, has concluded that the scientific evidence of global warming is unequivocal and that the evidence overwhelmingly supports the conclusion that human activity, primarily the combustion of fossil fuels is responsible for that warming.

There is a broad consensus among the business, scientific and environmental communities that global warming is an issue that must be addressed. Moreover, the people of the state of Connecticut recognize that we have a moral obligation to address global warming in order to leave a better future for our children.

Why should Connecticut be concerned about Climate Change? We should care first because we are a big part of the problem. The Northeast is the world's seventh largest emitter of greenhouse gases, and Connecticut is responsible for approximately 23% of New England's total GHG emissions. In fact, Connecticut emits more greenhouse gas pollution than Venezuela and Chile combined.

Second, although Climate Change is a global problem, the consequences are local. Temperatures across the Northeast have risen 1.5 degrees since 1970. Winter temperatures have risen more than 4 degrees F. between 1970 and 2000.

As a coastal state, Connecticut has particular cause for concern. Connecticut's rate of sea level rise is between 0.08 and 0.10 inches per year. Models predict a sea level increase of 5.1 to 8.3 inches by 2020 and 8.1 to 16.7 inches by 2050. The traditional 100-year flood is likely to occur, on average every 17 years. This sea level rise and increased flooding threatens the state's infrastructure and coastal wetlands, and promises increased property damage as a result of storm surges. In addition to containing the state's primary transportation infrastructure, there is more than \$400 billion worth of privately insured property along our coast.

¹ Representing Bridgeport, Easton, Fairfield, Hamden, Hartford, Ledyard, Mansfield, Middletown, Milford, New Haven, Stamford, Stratford and West Hartford.

Failure to enact meaningful climate change programs will result in profound adverse health and economic impacts.

Connecticut already suffers from some of the worst air quality in the nation. The state ranks third in the nation, trailing only California and Texas, for the highest peak concentrations of ozone. Connecticut's asthma rate surpasses the national average, with more than 200,000 adults and 75,000 children affected. An increase of 4 degrees C would mean an approximately 20% increase in ozone smog concentrations, exacerbating asthma conditions throughout the state. In 1998 treating asthma cost Connecticut's residents \$134 million. This is likely to increase as higher temperatures and increased smog exacerbates asthma symptoms.

Beyond asthma, increasing temperatures produce serious adverse health impacts in more straight-forward ways. In 2000, the U.S. experienced twice as many high heat stress days as in 1948. Models predict that by the 2050s there will be on average 10 more high heat stress days per year in Connecticut than there were in the 1990s. Elderly populations and low-income groups in urban areas are the most vulnerable to these conditions.

Finally, increasing temperatures are likely to increase vector-borne diseases transmitted by insects. Increased temperatures increase the opportunity for transmission of diseases such as Lyme disease and Eastern equine encephalitis. An increase in average global temperatures of several degrees could increase by 100 times the capacity of insects to transmit disease in temperate regions like Connecticut. Warmer temperatures may also lead to the introduction of new diseases associated with warmer areas, such as West Nile Virus and malaria.

Global warming threatens Connecticut's economy and will have profound impacts on the quality of life for Connecticut's residents. Connecticut faces economic challenges arising from the decline of hardwood species, reduced agricultural productivity, shifting fisheries and coastal sea level rise. Rural areas and those reliant on tourism may be particularly hard hit by agricultural and tourism-related impacts, while larger cities will face increased threats from high heat stress days, increased smog and ozone and increased incidences of asthma and respiratory-related conditions.

Agricultural Commodities are a \$345 million business in Connecticut. Increasing temperatures will increase the colonization and spread of invasive weeds such as kudzu, witchweed and itchgrass in Connecticut, threatening agricultural, forest and conservation land. Warmer temperatures will also bring more insect pest species. As these species multiply, farmers will be forced to rely on more frequent pesticide applications and the use of increasingly potent pesticides, heightening environmental and human health risks.

Maple syrup production is wholly reliant on climate. Production has been steadily shifting northward from New England to Canada. Just a few decades ago, New England accounted for 80 percent of the world's maple syrup production, today it accounts for just 20 percent.

There is a silver lining, however. In terms of the economy, global warming solutions present opportunities for Connecticut to fulfill its promise as a center of clean renewable energy technologies.

Firms are recognizing that so-called "green-tech" could be the largest economic opportunity of the 21st century. By establishing mandatory emissions limits, investors have the certainty of knowing that there will be a strong market demand for their products.

Pioneering states will see increased investment and have the opportunity to see high-tech energy industries boom within their borders. The California global warming law and its renewable standards are driving entrepreneurs to innovate. Clean tech businesses want to be in states that put their environmental rhetoric into action and that have a base of potential customers.

In California, the investment firm Kleiner Perkins Caufield & Beyers is setting aside \$100 million to fund clean energy technologies. Investment in clean tech start-ups in California now amounts to \$2.4 billion, up 262 percent from 2000. The clean tech industry is expected to be worth \$92 billion by 2013.

Connecticut currently has the largest concentration of fuel cell companies in the nation. The industry employs more than 2,100 people and had revenues of more than \$400 million in 2005. Nationwide, the industry is expected to grow over the next ten years to 120,000 jobs and \$18.6 billion in annual revenue.

However, without increased investment, Connecticut could be in danger of losing its edge to other states that are looking towards fuel cells as an attractive alternative energy endeavor.

In addition to new renewable energy innovation, meaningful climate action will help in the one area where local Connecticut businesses and residents are likely to feel an economic pinch - fuel and energy costs. The centerpiece of any carbon reduction program is of necessity making our homes and businesses more energy efficient and increasing the amount of electricity we generate from clean renewable energy sources. These measures not only reduce direct energy costs, but the dollars spent on necessary energy costs remain in the state and further stimulate the local economy, rather than going to out-of-state energy and fuel providers.

For all of the foregoing reasons, Connecticut Fund for the Environment urges the General Assembly to adopt mandatory science-based emissions limits and establish a statewide cap on carbon emissions.